

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

Declaration, Power of Attorney and Petition

WE (I) the undersigned inventor(s), hereby declare(s) that:

My residence, post office address and citizenship are as stated below next to my name,

We (I) believe that we are (I am) the original, first, and joint (sole) inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled

ARRAY SUBSTRATE FOR IPS MODE LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR FABRICATING THE SAME

the specification of which

<input checked="" type="checkbox"/>	is attached hereto.		
<input type="checkbox"/>	was filed on		
		as Application No.	
		and amended on	
<input type="checkbox"/>	was filed as PCT international application		
	Number		
	on		
	and was amended under PCT Article 19		
	on		(if applicable).

We (I) hereby state that we (I) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We (I) acknowledge the duty to disclose information known to be material to the patentability of this application as defined in Section 1.56 of Title 37 Code of Federal Regulations.

We (I) hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s)

Application No.	Country	Day/Month/Year	Priority Claimed			
2001-0084259	KOREA	24 December 2001	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
			<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
			<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

			<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
--	--	--	--------------------------	-----	--------------------------	----

We (I) hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below.

(Application Number)

(Filing Date)

We (I) hereby claim the benefit under 35 U.S.C. §120 of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status (pending, patented, abandoned)

And we (I) hereby appoint Song K. Jung, Reg. No. 35,210; John M. Kelly, Reg. No. 33,920; Rebecca Goldman Rudich, Reg. No. 41,786; Teresa M. Arroyo, Reg. No. 50,015 and William D. Titcomb, Reg. No. 46,463 as our (my) attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent Office connected therewith; and we (I) hereby request that all correspondence regarding this application be sent to Song K. Jung of McKenna Long & Aldridge LLP, Attorneys At Law, 1900 K Street, N.W., Washington, D.C. 20006.

We (I) declare that all statements made herein of our (my) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

IK-SOO KIM

NAME OF FIRST INVENTOR

Ik Soo Kim

Signature of Inventor

12. 9. 2002

Date

Residence: 709-503, Ureukjugong Apt.,

1146-11, Sanbon-dong, Gunpo-si, Gyeonggi-do

Republic of Korea,

Citizen of: Republic of Korea

Post Office Address: Same As Above

GEE-SUNG CHAE

NAME OF FIRST INVENTOR

Signature of Inventor

Date

Residence: **Incheon-kwangyokshi, Korea**

Hanyang Icha APT. 111-607, Dongchun-
dong, Yeonsu-gu

Incheon-kwangyokshi, Republic of Korea,

Citizen of: **Republic of Korea**

Post Office Address: **Same As Above**

Declaration, Power of Attorney and Petition

WE (I) the undersigned inventor(s), hereby declare(s) that:

My residence, post office address and citizenship are as stated below next to my name,

We (I) believe that we are (I am) the original, first, and joint (sole) inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled

ARRAY SUBSTRATE FOR IPS MODE LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR FABRICATING THE SAME

the specification of which

<input checked="" type="checkbox"/>	is attached hereto.
<input type="checkbox"/>	was filed on _____
	as Application No. _____
	and amended on _____
<input type="checkbox"/>	was filed as PCT international application
	Number _____
	on _____
	and was amended under PCT Article 19
	on _____ (if applicable).

We (I) hereby state that we (I) have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

We (I) acknowledge the duty to disclose information known to be material to the patentability of this application as defined in Section 1.56 of Title 37 Code of Federal Regulations.

We (I) hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or §365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed. Prior Foreign Application(s)

Application No.	Country	Day/Month/Year	Priority Claimed			
2001-0084259	KOREA	24 December 2001	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
			<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
			<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

				<input type="checkbox"/>	Yes	<input type="checkbox"/>	N
--	--	--	--	--------------------------	-----	--------------------------	---

We (I) hereby claim the benefit under Title 35, United States Code, §119(c) of any United States provisional application(s) listed below.

(Application Number)

(Filing Date)

We (I) hereby claim the benefit under 35 U.S.C. §120 of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

Application Serial No.	Filing Date	Status (pending, patented, abandoned)

And we (I) hereby appoint Song K. Jung, Reg. No. 35,210; John M. Kelly, Reg. No. 33,920; Rebecca Goldman Rudich, Reg. No. 41,786, Teresa M. Arroyo, Reg. No. 50,015 and William D. Titcomb, Reg. No. 46,463 as our (my) attorneys, with full powers of substitution and revocation, to prosecute this application and to transact all business in the Patent Office connected therewith; and we (I) hereby request that all correspondence regarding this application be sent to Song K. Jung of McKenna Long & Aldridge LLP, Attorneys At Law, 1900 K Street, N.W., Washington, D.C. 20006.

We (I) declare that all statements made herein of our (my) own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

IK-SOO KIM

NAME OF FIRST INVENTOR

Signature of Inventor

Date

Residence: 709-503, Ureukjugong Apt.,

1146-11, Sanbon-dong, Gunpo-si, Gyeonggi-do

Republic of Korea,

Citizen of: Republic of Korea

Post Office Address: Same As Above

GEE-SUNG CHAE

NAME OF FIRST INVENTOR

Gee Sung CHAE

Signature of Inventor

Dec. 5, 2002

Date

Residence: Incheon-kwangyokshi, Korea

Hanyang Icha APT. 111-607, Dongchun-
dong, Yeosu-gu

Incheon-kwangyokshi, Republic of Korea,

Citizen of: Republic of Korea

Post Office Address: Same As Above

 UNITED STATES
PATENT AND
TRADEMARK OFFICE

APRIL 18, 2003

PTAS

Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
www.uspto.gov

MCKENNA LONG & ALDRIDGE LLP
SONG K. JUNG
1900 K STREET, N.W.
WASHINGTON, DC 20006



102315714A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

8733.742.00

TMA

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/13/2002

REEL/FRAME: 013580/0763
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KIM, IK-SOO

DOC DATE: 12/09/2002

ASSIGNOR:

CHAE, GEE-SUNG

DOC DATE: 12/05/2002

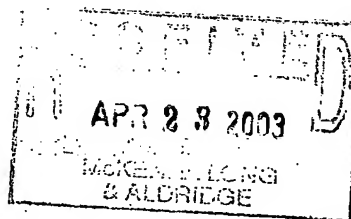
ASSIGNEE:

LG. PHILIPS LCD CO., LTD.
20, YOIDO-DONG, YOUNGDUNGPO-KU
SEOUL, REPUBLIC OF KOREA

SERIAL NUMBER: 10318235
PATENT NUMBER:

FILING DATE: 12/13/2002
ISSUE DATE:

JEFFREY OLSEN, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS



12-13-02

12-19-2002



102315714

Form PTO-1595
(Rev. 03/01)
OMB No. 0651-0027 (exp. 5/31/2002)

EET U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof

1. Name of conveying party(ies):

IK-SOO KIM-
GEE-SUNG CHAE

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

3. Nature of Conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Date: IK-SOO KIM- December 9, 2002
GEE-SUNG CHAE- December 5, 2002

2. Name and address of receiving party(ies)

Name: LG.Philips LCD Co., Ltd.

Internal Address:

Street Address:

20, Yoido-dong, Youngdungpo-ku
Seoul, KOREA

City:

State:

Zip:

Additional name(s) & address(es) attached:

☐ Yes ☒ No

4. Application number(s) or patent number(s): 10/318235

If this document is being filed together with a new application, the execution date of the new application is:

A. Patent Application No.(s):

B. Patent No.(s):

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Song K. Jung
MCKENNA LONG & ALDRIDGE LLP

Internal Address: Atty. Dkt.: 8733.740.00-US

Street Address:
1900 K Street, N.W.

City:
Washington

State: DC Zip: 20006

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41)

\$ 40.00

☒ Enclosed

☐ Authorized to be charged to deposit account

☐ Authorized to be charged to credit card
(Form 2038 enclosed)

8. Deposit account number:

50-0911

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Teresa M. Arroyo

Name of Person Signing

50,015

Signature

December 13, 2002

Date

Total number of pages including cover sheet, attachments, and documents:

12/16/2002 HDEMESS1 00000022 10318235

01 FC:8021

40.00, 0P

DC:114724.1

Docket N : 8733.742.00

Assignment of Application

WHEREAS, I (WE)		Ik-Soo Kim and Gee Sung CHAE	
		, respectively,	
have invented certain new and useful improvements in:			
ARRAY SUBSTRATE FOR IPS MODE LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR FABRICATING THE SAME			
for which an application for Letters Patent was executed on			

(Application No.		, Filed), and
WHEREAS,	LG. Philips LCD Co., Ltd.			
(hereinafter referred to as "ASSIGNEE") having a place of business at: 20 Yoido-dong, Youngdungpo-ku, Seoul, KOREA				

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and

enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of McKenna Long & Aldridge LLP, Attorneys at Law, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: _____

(Signature of Inventor)

Ik-Soo KIM

Date: Dec. 5, 2002

(Signature of Inventor)

Gee Sung CHAE

McKenna Long & Aldridge LLP
Attorneys At Law
1900 K Street, N.W.
Washington, D.C. 20006

Docket No.: 8733.742.00

Assignment of Application

WHEREAS, I (WE)	Ik-Soo Kim and Gee Sung CHAE		
			, respectively,
have invented certain new and useful improvements in:			
ARRAY SUBSTRATE FOR IPS MODE LIQUID CRYSTAL DISPLAY DEVICE AND METHOD FOR FABRICATING THE SAME			
for which an application for Letters Patent was executed on			
(Application No.		, Filed), and
WHEREAS,	LG. Phillips LCD Co., Ltd.		
(hereinafter referred to as "ASSIGNEE") having a place of business at: 20 Yoido-dong, Youngdungpo-ku, Seoul, KOREA			

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and

enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of McKenna Long & Aldridge LLP, Attorneys at Law, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: 12.9.2002

Kim 2/K Soo
(Signature of Inventor)
Ik-Soo KIM

Date: _____

(Signature of Inventor)
Gee Sung CHAE

McKenna Long & Aldridge LLP
Attorneys At Law
1900 K Street, N.W.
Washington, D.C. 20006